

حمل الآن

مجاناً وحصرياً

المراجعة رقم (1)

اختبار شهر أكتوبر



Lesson 1

» Computer Networks:

They are groups of computer devices that are connected to each other to communicate and share information.

» Network devices:

① Modem:

- It connects the Internet in your home.

Signal From the ISP → Modem → Digital Signal →

② Switches:

- They send data to a specific device over a network, which helps make connections easier and faster (intelligent devices).

③ Router:

- ① It is a device that provides the Internet throughout the home.
- ② It sends data between home devices.
- ③ It connects devices using wires or wirelessly, using Wi-Fi.



④ Cables and Ports:

- Some devices connect to the Internet through wires (Ethernet cables).
- These wires are plugged into holes, called ports.

⑤ Local Area Network (LAN)

- A LAN, which connects devices via cables, is a type of wired network.
- **Example:** A school computer lab

» Types of Networks:

- ① Wired networks: They use physical wiring cables that plug into ports.
- ② Wireless networks: They connect devices without wiring through a wireless or Wi-Fi.

» Artificial Intelligence (AI):

It is a comprehensive term for computer applications that perform complex tasks simulating the thinking and performance of the human element, such as the ability to learn and reason.

» Applications of AI:

- ① The ability to learn and deduce.
- ② Write an article on a topic.
- ③ Imitate sounds.
- ④ Create videos.
- ⑤ Predict the faults that may occur in networks.

Lesson 2

» Augmented Reality (AR) combines the real world with a virtual world by displaying 3D models that look like the real world.

- **Example of AR:** Phone games that place cartoon characters in the real places around you.

» Virtual Reality (VR): It is a virtual 3D environment that allows users to explore and interact with the surroundings as if it were reality.

» To experience VR, users often wear a VR headset that blocks out the real world and provides immersive views



» Applications of VR:

- ① You can visit far **museums** virtually.
- ② You can play video games that make you feel like flying a plane or traveling in space.

» Artificial Intelligence (AI): It is the ability of the computer to **think**, **learn**, and **deduce**.

» Examples of AI:

- ① It predicts the word you will write from the words you have written previously.
- ② AI is used to **unlock** your phone with **facial recognition**.
- ③ Robots that can manufacture products in factories.



Lesson 3

» Goals of **assistive technology** is to:

- ① Improve independence of individuals.
- ② Improve the lives of people of determination.

» Examples:

- ① Smartphones enlarge text or use voice commands for people with poor vision or hand difficulty.
- ② Laptops with a **Braille terminal** help blind people read and write.

» **User Experience:** It describes how people use and interact with a product, and how to evaluate their experiences. It may be positive or negative.

» **Factors to evaluate a user experience, it can be:**

- | | |
|---------------------------|--------------|
| ① Useful and easy to use. | ② Desirable. |
| ③ Accessible. | ④ Developed. |

Lesson 4

① **The Egyptian Knowledge Bank (EKB):**

- It's a very large public database.

② **Internet Search:**

- Such as Google search.
- Be careful; it may give unreliable information.

③ **Searching Within a Database:**

- You can use keywords in your search.

④ **The Alexandria Library Catalog:**

- It helps you find books and resources available in the Library of Alexandria.

» **Library Catalog:** It is a database that includes all the items owned by a library.



Database

It contains a lot of information, like a very organized library, where each place of information has a specific place that makes it easy to access.

- قاعدة البيانات: تحتوي على الكثير من المعلومات، مثل مكتبة كبيرة ومنظمة؛ حيث يكون لكل معلومة مكان محدد يجعل الوصول إليها سهلاً.

Command	Shortcut	Function
Copy	Ctrl + C	• It's used to make a copy of the selected item. • Select item → Press Ctrl + C
Cut	Ctrl + X	• It's used to move the selected item from its original place. • Select item → Press Ctrl + X
Paste	Ctrl + V	• It's used to place the copied or cut item in a new place. • After copying or cutting → Press Ctrl + V

Lesson 5

» **Operating System (OS):** It is the software that manages a computer's functions, hardware, and software.

Microsoft Windows	macOS
• It's one of the most popular worldwide. • It uses closed-source software.	 macOS • It runs on Apple computers, such as MacBook and iMac.

» **Mobile Operating Systems:**

The **most popular** mobile OSs are **Android** and **Apple iOS**.

Android	Apple iOS
It's the most popular operating system for mobile devices, used by many phone companies.	• It runs on iPhone and iPad. • It is very safe and uses closed-source software.

- » **Open-source Software:** It means a person can change and read the programming code.
- » **Closed-source Software:** No one can see its code or modify it, except the owner.
- » **Advanced Operating Systems:**
 - ① The Robot Operating System (ROS)
 - ② Self-driving Cars Operating Systems



Exercises

on Lesson

1

1 Choose the correct answer:

- 1 is/are a group of computer devices that are connected to each other for a common purpose. (الإسكندرية – منتزه ثانٍ 2024)
a. Devices b. Networks c. Routers d. Software
- 2 A school computer lab is an example of a
a. service provider b. LAN
c. Wi-Fi connection d. Global network
- 3 is a comprehensive term for computer application that perform complex tasks that simulate human thinking and performance.
a. Artificial intelligence b. Application
c. Modern d. Router (قنا – نجع حمادي 2025)
- 4 networks connect devices using Wi-Fi. (الجيزة – حدائق أكتوبر 2025)
a. Wired b. Wireless c. Software d. Both a and b
- 5 Through you can transfer data with wires and cables.
a. wireless networks b. Wi-Fi
c. wired networks d. email (الإسكندرية – برج العرب 2024)
- 6 A router connects devices through
a. Wi-Fi b. cables
c. USB d. both a and b
- 7 Wireless networks are also known as
a. LAN b. Wi-Fi c. modem d. switch
- 8 The abbreviation of artificial intelligence is
a. AR b. ALT c. IA d. AI (دمياط 2024)
- 9 The modem converts the signals from the into a digital signal.
a. device b. LAN c. ISP d. Wi-Fi

- 10 A network that is connected without wiring is named
 a. physical wiring b. wireless c. ports d. cables
 (الإسكندرية – شرق 2024)
- 11 Cables and wires in wired networks are plugged into holes called
 (القاهرة – الزيتون 2025) (أسيوط 2025) (أبنأؤنا في الخارج 2024)
 a. ports b. Wi-Fi c. switches d. modems
- 12 are intelligent devices that send data to a specific device over a network.
 (البحيرة – دمنهور 2024)
 a. Switches b. Hubs c. Modems d. Cables
- 13 Artificial Intelligence can
 a. write an article b. create a video
 c. predict faults in networks d. all of them
- 14 A converts the signal from the internet service provider (ISP) into a digital signal.
 (الإسكندرية – العجمي 2025) (القليوبية 2025) (الغربية 2024)
 a. modem b. router c. switch d. scanner
- 15 In networks, a LAN stands for
 a. Long Area Network b. Local Area Network
 c. Large Area Network d. Linked Area Network
- 16 When a user requests a video from the Internet, the request first goes to the
 a. modem b. router
 c. ISP d. digital signal
- 17 Wired networks connect devices using
 a. Wi-Fi b. wires c. cables d. both b and c
- 18 is a technology that help imitate the sound of an actual human being.
 (القاهرة – الزيتون 2025)
 a. Artificial intelligence b. speaker
 c. Bluetooth d. Assistive technology
- 19 The Internet service provider is Known by the abbreviation
 a. GPS b. USB c. ISP d. GRP (أسيوط 2025)

2 Put (✓) or (✗):

- 1 A computer doesn't need network connection devices to transfer data. (القليوبية 2024) ()
- 2 Devices can be connected without wiring (wireless or Wi-Fi). (دمياط 2024) (الإسكندرية – وسط 2024) ()
- 3 Wireless networks connect devices with physical wiring and cables. ()
- 4 A modem connects devices inside a LAN. ()
- 5 The modem is the device that connects to the service provider (ISP). ()
- 6 Ports are special wires that connect devices to the Internet. ()
- 7 AI can be used for writing an article about a topic. ()
- 8 A modem converts the signal from the ISP into a digital signal that can be read by devices. (الشرقية – ديرب نجم 2025) ()
- 9 Artificial intelligence can imitate the sounds of people. (الشرقية – الإبراهيمية 2025) ()
- 10 A modem sends data to a specific device over a network. (القاهرة – المرح 2025) (الإسكندرية – المنتزة أول 2025) (الجيزة – الشيخ زايد 2024) ()
- 11 When a computer requests a video from YouTube, the request first goes to the Modem. ()
- 12 Wireless networks are connected by Wi-Fi. (الإسكندرية – شرق 2025) ()
- 13 Switches send data to a device over a network to make connections easier. (الإسكندرية – المنتزة أول 2025) ()
- 14 The Router only uses Wi-Fi to distribute the Internet inside the house. ()
- 15 Artificial intelligence is doing a complex task that simulates the performance and thinking of human. (القاهرة – الزيتون 2025) ()

3 Complete the missing parts using the words between the brackets:

(ISP – ports – specific – modem – AI)

- 1 works to imitate sounds when provided with the tone of voice of an actual being. (طنطا – شرق 2025) (طلخا 2025) (الدقهلية 2025) ()

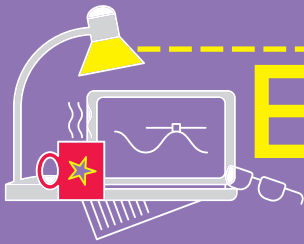
- 2 Switches send data to a(an) device on the network.
- 3 In wired networks, cables and wires are plugged into
- 4 Internet service provider is abbreviated as (القاهرة – غمرة 2025)
- 5 A converts the signal from the (ISP) into a digital signal.
- (الجيزة – الدقي 2025) (الإسماعيلية 2024)

4 Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 AI	a. A device that provides the internet throughout the home.
2 A router	b. are groups of devices or things that are connected together.
3 A switch	c. is a hole on devices where cables are plugged in.
4 Networks	d. computer applications that simulate the thinking and performance of people.
5 A port	e. is an intelligent device that send data to a specific device on the network.

1 2 3 4 5





Exercises

on Lesson

2

1 Choose the correct answer:

- 1 are examples of futuristic technology.
a. Virtual reality (VR) b. Augmented reality (AR)
c. Artificial intelligence (AI) d. All of them
- 2 combines the real world with a virtual world by adding images using computers. (الجيزة – جنوب الجيزة 2025) (أسيوط 2024)
a. Virtual reality b. Augmented reality
c. Assistive technology d. Artificial intelligence
- 3 is a virtual 3-D environment that allows users to explore and interact with the surroundings, as if it were reality. (القاهرة الجديدة 2024)
a. Virtual reality b. Artificial intelligence
c. Assistive technology d. Augmented reality
- 4 The ability of the computer to think, learn, and deduce is
a. virtual reality(VR) b. augmented reality(AR)
c. artificial intelligence(AI) d. none of them (الإسكندرية – وسط 2025)
- 5 Viewing virtual 3D characters placed into real world via a phone screen is an example of
a. virtual reality (VR) b. Augmented Reality (AR)
c. Artificial Intelligence (AI) d. Network devices
- 6 To experience virtual reality, users often wear
a. 3D glasses b. smart gloves
c. AR headsets d. VR headsets (الجيزة – حدائق أكتوبر 2025)
- 7 Augmented reality mixes the real world with a world.
a. View b. True
c. Virtual d. Non of them (طنطا – شرق 2025)

- 8 Augmented reality shows a/an model of what looks like the real world.
 a. 2-D b. 3-D c. 4-D d. invisible
- 9 Users often wear that block(s) out the real world.
 a. a mobile b. Wi-Fi c. a mouse d. VR headsets
- (القاهرة – عين شمس 2024)
- 10 Common applications of VR is in
 a. games b. writing
 c. networking d. all of them
- 11 technology is used to unlock the phone using the face recognition system.
 a. Assistive technology b. Artificial Intelligence
 c. Virtual reality d. Transformers
- (أسبوط 2025)
- 12 Advanced technologies like AR, VR, and AI mainly aim to
 a. replace all human work b. improve our lives
 c. increase network security d. produce old products
- 13 AI learns by available examples.
 a. analyzing b. storing c. saving d. ignoring
- 14 predicts the word you will write from words you have written previously.
 a. VR b. AR c. AI d. IR
- 15 All applications include
 a. the ability to learn b. predicting computer faults
 c. unlock your phone d. all of them
- 16 Is the ability of the computer to think, learn and deduce.
 a. AI b. VR
 c. AR d. Non of them (المنوفية – شبين الكوم 2025)

2 Put (✓) or (✗):

- 1 A computer learns by analyzing available examples. ()
- 2 AR, VR, and AI are considered futuristic technologies. ()
- 3 Virtual reality (VR) is a virtual 3-D environment. (المنوفية – تالا 2024) ()
- 4 To experience virtual reality, users often wear AR headsets. ()
- 5 Artificial intelligence (AI) is the computer's ability to think, learn, and deduce. (الجيزة – جنوب الجيزة 2025) (المنوفية – تالا 2024) (الدقهلية 2024) ()
- 6 Using VR, you can visit far museums virtually. ()
- 7 There is no difference between augmented reality and virtual reality. (الجيزة – حدائق أكتوبر 2025) (أسيوط 2024) ()
- 8 Virtual reality combines the real world with a virtual world by displaying 3D models look like reality. (الجيزة – العمرانية 2025) (الإسكندرية – وسط 2024) ()
- 9 Robots that can manufacture products in factories are from VR applications. ()
- 10 Future technology can improve daily life. (أسوان 2024) ()
- 11 Users often wear AR headsets that block out the real world. (الإسكندرية – منتزه أول 2024) ()
- 12 VR headsets allow users to see the real world while using them. ()
- 13 Augmented reality can be done through mobiles and tablets. (القاهرة – عين شمس 2024) ()
- 14 AI can predict words based on previous writing. ()
- 15 Virtual reality can show a 3-D model of what the real world looks like. (الإسكندرية – وسط 2024) ()
- 16 A phone games that place a 3D character in a real place is an example of VR. ()
- 17 Futuristic technologies can't help people with disabilities. ()

- 18 AI is used to unlock your phone with facial recognition. ()
- 19 An AR app can show you new furniture will look in your house. ()

(الإسكندرية – المنتزة أول 2025)

3 Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 VR	a. includes AI, AR, and VR.
2 AR	b. it is the ability of a computer to think, learn, and deduce.
3 AI	c. they are application of using AI.
4 Robots	d. it is a virtual 3-D environment that allows users to interact with the surroundings, as if it were reality.
5 Future technology	e. it mixes of real world with virtual world.

1 2 3 4 5



on

Lessons 1&2

1 Choose the correct answer:

- (القاهرة – الزيتون 2025)

2 Put (✓) or (x):

- (الجيزة – الدقي 2025)



3

(الإسكندرية – المنتزه أول 2025)

- 9 Smartphones help people with poor vision by
 - a. enlarging text
 - b. playing music
 - c. charging faster
 - d. none of them
- 10 If the product is practical and meets customer needs, the user experience will be
 - a. positive
 - b. negative
 - c. neutral
 - d. expensive
- 11 Complicated and hard-to-use products result in user experiences.
 - a. positive
 - b. negative
 - c. neutral
 - d. cheap

2 Put (✓) or (X):

- 1 Home robot cleans floors automatically, so it is useful and easy to use. ()
- 2 Smartphones can support blind people by enlarging text. ()
- 3 User experience is always positive. (الجيزة – حدائق أكتوبر 2025) ()
- 4 Voice commands in smartphones support people with hand difficulties. ()
- 5 Braille keyboard is used mainly by deaf people. ()
- 6 User experience describes how people use and interact with a product. (الإسكندرية – برج العرب 2024) ()
- 7 If the device can be used by people with special needs, the device is accessible. ()
- 8 One of the main goals of assistive technology is to improve a person's independence. (الجيزة – 6 أكتوبر 2025) ()



Exercises

on Lesson

1

1 Choose the correct answer:

- The most important (common) command(s) used in word processing programs is/are
(القاهرة - غمرة 2025)
a. Copy b. Cut c. Paste d. all of them
- EKB is a type of
a. database b. search engine
c. library catalog d. none of them
- Internet search engines may provide information.
a. reliable b. unreliable c. both a and b d. none of them
- To add copied content to another place, use the command.
a. Cut b. Copy c. Paste d. Del
(أبناؤنا في الخارج 2024)
- A database is a very large, organized library containing lots of
a. secrets b. hardware c. information d. entertainment
- is a database that includes all the items owned by a library.
a. The EKB b. A search engine
c. A library catalog d. A keyword
(الإسكندرية - وسط 2025)
- To copy a text or image, use the shortcut
a. Ctrl + C b. Ctrl + X c. Ctrl + V d. Ctrl + P
- When you search online, make sure the results you get are
a. reliable b. accurate
c. biased d. both a and b
(الجيزة - حدائق أكتوبر 2025)
- To move content from one place to another, use the command.
a. Copy b. Del c. Cut d. Paste
(أبناؤنا في الخارج 2025)
- To paste a text or image, use the shortcut
a. Ctrl + X b. Ctrl + V c. Ctrl + P d. Ctrl + A

- 11 You can use to move a text or image to another place.
 a. Ctrl + V b. Ctrl + C c. Ctrl + X d. Ctrl + Z

2 Put (✓) or (X):

- 1 Copy, Cut, and Paste are word processing commands. ()
 (الجيزة - حدائق أكتوبر 2025) (السويس 2024)
- 2 A database is a large set of information that is highly organized. ()
- 3 The library catalog is a type of search engines. ()
- 4 Ctrl + C removes the text from the document. ()
- 5 To repeat a statement in a word processing file, choose copy and paste text. ()
 (الإسكندرية - المنزه ثان 2025)
- 6 The Egyptian Knowledge Bank (EKB) is a database primarily for games and entertainment. ()
- 7 Google is a reliable database. ()
- 8 A library catalog is a database that includes all the items and sources owned by a library. ()
 (دمياط 2024) (المنوفية - شبين الكوم 2025)
- 9 The Egyptian Knowledge Bank (EKB) is an untrusted source of information. ()
 (الإسكندرية - وسط 2024)
- 10 You can press "Ctrl + C" to cut a text or an image in Windows. ()
 (الشرقية - الإبراهيمية 2025)
- 11 After cutting or copying an item, you can place it in a new location using the Ctrl + V shortcut. ()
- 12 The Library of Alexandria Catalog is based on a database. ()
 (الإسماعيلية 2024)
- 13 The Egyptian Knowledge Bank (EKB) is an example of a private database for all Egyptians. ()
 (القاهرة - غمرة 2025)

3 Complete the following sentences using the words between the brackets:

(library catalog – search engine – keywords – Databases – EKB)

- 1 A, such as Google search, may give unreliable results.
- 2 The is an example of a public database that covers many subjects.
- 3 It is preferable to use to search for information on a database.
- 4 are collections of information, like a very large, organized library.
(الدقيلبة 2025) (البحيرة – دمنهور 2024)
- 5 A is a database that includes all the items owned by a library.
(مورسعيد 2025) (الجزيرة – الشيخ زايد 2024)



Test Yourself

Lessons
3&4

1 Choose the correct answer:

- helps people of determination.
a. User experience b. Assistive technology
c. Virtual reality d. A screen (القاهرة - عين شمس 2024)
- A computer with a Braille keyboard helps people read and write.
a. deaf b. blind c. elderly d. none of them
- You can search for information in a database using
a. passwords b. keywords
c. long sentences d. specialized software
- A database is considered a very large and highly library of information.
a. expensive b. difficult c. organized d. none of them
- Use the shortcut to duplicate a text or an image.
a. Ctrl + C b. Ctrl + X c. Ctrl + V d. Ctrl + P
- The user experience can be
a. positive b. negative
c. both a and b d. none of them
- You can paste an item you have cut or copied using
a. Ctrl + A b. Ctrl + X c. Ctrl + Z d. Ctrl + V

2 Put (✓) or (X):

- A library catalog is a database containing books in a library. ()
- To move an item, use the Ctrl + C shortcut. ()
- Internet search always gives reliable results. ()
- The EKB is a public database for Egyptians. ()
- The cut, copy, and paste commands are used in text processing. ()
- Text enlargement helps users with low vision. ()
- Assistive technology improves the lives of people of determination. ()
- (القاهرة - غمرة 2025) ()
- A home robot helps improve our lives. ()



Exercises on Lesson 5

1 Choose the correct answer:

- 1 The is the software that manages a computer's functions, such as memory, drives, and printers. (الإسكندرية – المنقريه أول 2024) (أبنؤنا في الخارج 2024)
a. programming language b. operating system
c. input unit d. email
- 2 is open-source software used for building robot applications.
a. Windows b. Apple iOS
c. ROS d. HTML
(الإسكندرية – المنقريه أول 2025) (الجيزة – 6 أكتوبر 2025)
- 3 means that a person can't change and read the programming code.
a. Open-source programming b. Closed-source programming
c. Both a and b d. None of them (الإسكندرية – المنقريه أول 2025)
- 4 is an operating system for Apple computers. (الجيزة – جنوب الجيزة 2025)
a. Windows b. macOS c. iOS d. ROS
- 5 The most popular mobile OS is/are (دمياط 2024) (الجيزة – جنوب الجيزة 2025)
a. Android b. Apple iOS c. macOS d. none of them
- 6 The runs a computer's software and hardware.
a. operating system b. CPU
c. hardware d. keyboard
- 7 A is advanced technology that uses a specialized OS.
a. calculator b. typewriter c. self-driving car d. refrigerator
- 8 is an open-source operating system for mobile devices.
a. Android b. iOS
c. macOS d. Windows (القاهرة الجديدة 2024)
- 9 is a mobile operating system.
a. ROS b. iOS c. Linux d. macOS
- 10 There are many operating systems for computers, such as Windows and
a. iOS b. Android c. ROS d. macOS

- 11 is a closed-source operating system for iPhone and iPad.
 a. Android b. Apple iOS c. Windows d. macOS
 (الإسكندرية - شرق 2024)
- 12 All the following are operating systems, except
 a. Android b. macOS c. Google d. Windows
- 13 The programs that allow people to change and read the programming code are programs.
 a. closed-source b. open-source
 c. purchase-required d. difficult-to-use
 (أبناؤنا في الخارج 2025)

2 Put (✓) or (X):

- 1 Android is an open-source operating system. (الجيزة - حدائق أكتوبر 2025) ()
- 2 iOS is an open-source operating system. (الدقهلية 2025) ()
- 3 Linux is the most popular operating system all over the world. ()
 (القاهرة الجديدة 2024)
- 4 iOS runs a computer's software and hardware, and allows a user to communicate with the computer easily. (القاهرة - المرج 2025) ()
- 5 Operating systems manage software only. ()
- 6 The Android operating system is used in iPhone and iPad devices. ()
 (القاهرة - عين شمس 2024)
- 7 Apple computers run on the Windows operating system. ()
 (القليوبية 2025) (المنوفية - تلا 2024) (دمياط 2024)
- 8 Windows is open-source software that can be edited by anyone. ()
 (العبور 2025) (القليوبية 2024)
- 9 Apple iOS is considered an open-source system. (الإسكندرية - شرق 2025) ()
- 10 Self-driving cars don't need operating systems to perform. ()
- 11 The most popular computers OSs are Android and Apple iOS. ()
 (الإسكندرية - وسط 2025)
- 12 Anyone can read and modify the code in closed-source software. ()
 (الشرقية - الإبراهيمية 2025)

3 Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 Closed-source software	a. means that anyone can read and change the code.
2 iOS	b. uses open-source software.
3 Operating system	c. runs on iPhone and iPad devices.
4 Open-source software	d. means that it can't be seen or changed by the public.
5 Android	e. is the software that manages a computer's functions.

1 2 3 4 5

4 Look and match:

Column (A)	Column (B)
1 macOS	a. is the operating system used on Apple mobile devices.
2 iOS	b. is the operating system used on Microsoft PCs.
3 Android	c. is the operating system used on mobile devices other than Apple products.
4 Windows	d. is the operating system used on Apple PCs.

1 2 3 4

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



حمل الآن

مجاناً وحصرياً

المراجعة رقم (2)

اختبار شهر اكتوبر



COMPUTER NETWORK DEVICES

- **Computer networks** connect computers with each other, to share important information and data.

- تربط شبكة الكمبيوتر أجهزة الكمبيوتر ببعضها البعض لمشاركة المعلومات والبيانات المهمة.

Making connections

1- **Wired** networks use physical wiring and cables which are plugged into holes on devices, called **ports**.

لإنشاء اتصال : يوجد نوعين من الاتصال (سلكي - لا سلكي)

- تستخدم الشبكات السلكية **Wired networks** الأسلاك والكابلات التي يتم توصيلها بفتحات في الأجهزة تسمى المنافذ "ports"

2- Devices can be connected **without wiring** by using radio waves (Wireless or Wi-Fi).



ويمكن توصيل الأجهزة من دون أسلاك أو كابلات (سلكية) باستخدام موجات الراديو لاسلكية أو واي فاي (Wi-Fi)

- Computers need different network connection devices to transfer data.

تحتاج أجهزة الكمبيوتر إلى أجهزة مختلفة للاتصال بالشبكة لنقل البيانات.

MODEM: a **device** that connects a local area network (**LAN**) to the **internet**.

It **converts** the **signal** from the internet service provider (ISP)

and transforms a signal into a **digital signal** that can be read by devices.



جهاز يصل شبكة محلية (LAN) بالإنترنت. يحول الإشارة من مزود خدمة (ISP) إلى إشارة رقمية يمكن للأجهزة ، تلقيها والتعرف إليها.



SWITCHES: they can send data to a **specific** device over a network, which helps to make connections easier and faster.

SWITCHES are intelligent



يمكنها ارسال بيانات الي جهاز معين عبر شبكة وذلك يساعد في تيسير التواصل واسرعه.

Artificial intelligence (AI)

is a machine's intelligence that can be used to **problem- solve**.

. It is a comprehensive term for computer applications that perform complex tasks that simulate the thinking and performance of the human element, such as the ability to **learn** and **reason**.

- الذكاء الاصطناعي (AI) ذكاء آلة يمكن استخدامه لحل المشكلات
- مصطلح شامل لتطبيقات الكمبيوتر التي تؤدي مهام معقدة تحاكي بها تفكير العنصر البشري
وأدائه مثل القدرة على التعلم والاستنتاج.

By providing these technologies with information and knowledge related to a subject, and possible answers to all possible questions, the machine can give answers to the data provided

من خلال إمداد هذه التقنيات بالمعلومات والمعرفة المرتبطة بمجال ما، والتخمينات، ووضع إجابات لجميع الأسئلة المحتملة التي يمكن أن تجيب عنها الآلة في هذا المجال

such as writing an article on a topic and inquiring about historical events and their sequence.

مثل : كتابة مقال عن موضوع ماء الاستفسار عن الأحداث التاريخية وتتابعها، بحيث تعمل الآلة على استرجاع البيانات التي أمدت بها عند الحاجة.



AI works to **imitate sounds** when provided with the tone of voice of an actual human being.

كما يعمل الذكاء الاصطناعي على تقليد الأصوات من خلال إمداده بنبرة صوت الإنسان الطبيعي.



Exercises

Put (✓) or (X) :

- 1- A computer network consists of at least one device ()
- 2- The computer network is only one type, which is the LAN ()
- 3- The main purpose of a computer network is to exchange files and information between connected devices ()
- 4- A device called a Modem is used to connect users to the internet ()
- 5- Wired networks use physical wiring and cables which are plugged into holes on devices, called ports. ()
- 6- The computer is an electronic device that creates and processes stored information ()
- 7- Devices can be connected without wiring by using radio waves ()
- 8- There is only one way to connect the network to the computer ()
- 9- Artificial intelligence is one of the strategies used to solve problems ()



Choose the correct answer:**(Modem - Switches -AI - Networks)**

- 1- are groups of devices or things that are connected to each other for a common purpose .
- 2- a device that connects a local area network (LAN) to the internet. It converts the signal from the internet service provider (ISP) can be read by devices.
- 3- The abbreviation of Artificial intelligence is
- 4- they can send data to a specific device over a network, which helps to make connections easier and faster.

Choose from column (A) what suits it in column (B) :

(A)	(B)
2- Laptop	a- Considered one of the computer devices.
3- Artificial intelligence (AI)	b- The place where input and output devices connect to the computer.
4- Wi-Fi	c- is a machine's intelligence that can be used to problem- solve.
5- Port	e- One of the methods of connecting the network to



Technology and artificial intelligence

Augmented reality (AR)

Augmented reality (AR) combines the **real world** with a **virtual world** by adding computer-generated images. This can be done through the camera of a smartphone or a tablet . and will show a 3-D model of what looks like the real world.



- يجمع بين العالم الحقيقي والواقع الافتراضي بإضافة صور مصممة بالكمبيوتر. يمكن فعل ذلك بواسطة كاميرا الهاتف الذكي أو جهاز لوجي لظهار صور تشبه العالم الحقيقي

- AR helps students become active participants in **learning** and makes learning more memorable.

- يساعد الواقع المعزز التلاميذ ليصبحوا مشاركين نشطين في عملية التعليم، ويرسخ المعلومات المكتسبة في أذهانهم

For example,

students in a **math** class can point their smartphone camera at a flat surface and project a 3-D image like a cube or cylinder onto the surface, as if the figure is in front of them.

- فيستطيع التلاميذ في حصة **الرياضيات** مثلاً، أن يوجهوا هواتفهم الذكية إلى سطح مستو وعرض صورة ثلاثية الأبعاد عليه، مثل مكعب أو أسطوانة، وكأن الشكل أمامهم.

Students in a **science** class can use a sky map app to point at the night sky and see a digital layer of labeled stars, planets, and nebulae.



ويمكن للتلاميذ في حصة **العلوم** أيضاً استخدام تطبيق الخرائط السماوية للإشارة إلى سماء الليل ورؤية طبقة رقمية من النجوم والكواكب والسدم.



Virtual reality (VR)

Virtual reality (VR) is a simulated 3-D environment that allows users to **explore** and **interact with the surroundings**, as if it were **reality**.

بيئة وهمية ثلاثية الأبعاد تسمح للمستخدمين باستكشاف محيطهم والتفاعل وكأنه حقيقة.

To experience VR, users often wear a **VR headset** that blocks out the real world and provides 360-degree views that immerse the user in another world.

وغالبًا ما يرتدي المستخدمون سماعات رأس الواقع الافتراضي للانغماس في تجربة الواقع الافتراضي

In the classroom, VR can take you to a world where insects and atoms are bigger than you, so that you can study them closely. It can take you to a museum thousand of miles away, or to a historical site hundreds of years ago.



أما في غرفة الفصل :
فيحملكم الواقع الافتراضي إلى عالم حيث الحشرات أو الذرات أكبر منكم حجماً
لتمكنوا من دراستها عن كثب . يمكنكم أيضاً من خلاله زيارة متحف
يبعد آلاف الأميال عنكم
الانتقال إلى موقع أثري قديم من خلال العودة آلاف السنين عبر التاريخ.

- A **cardboard VR headset** is an inexpensive way to experience VR using almost any smartphone.

إن سماعات رأس الواقع الافتراضي المصنوعة من الورق المقوى طريقة غير مكلفة للانغماس في تجربة الواقع الافتراضي باستخدام أي من أنواع الهواتف الذكية تقريباً.

Artificial intelligence (AI)

is the ability of the computer to think, **learn** and **deduce**.



The computer **learns** by **analyzing** the available examples.

إن الكمبيوتر يتعلم بتحليل الأمثلة المتوفرة.

For example, it **predicts** the word you will write from words you have written previously

فمثلا يتوقع الكلمة التي ستكتبها من خلال الكلمات التي كتبتها سابقا.

AI is used to unlock your phone with **facial recognition**.

-يستخدم الذكاء الاصطناعي لفتح هاتفك بواسطة نظام التعرف على الأوجه

How can futuristic technology improve everyday life?

كيف تستطيع التكنولوجيا المستقبلية على تحسين الحياة اليومية ؟

- It can improve the lives of people of determination.

يمكن للتكنولوجيا المستقبلية تحسين حياة الأشخاص ذوي الهمم

For example, **visually impaired people** can use AR to see their family members up close.

مثلا ضعاف البصر يمكنهم استخدام الواقع المعزز ليروا أفراد أسرهم عن قرب.

Disabled individuals can use virtual assistants powered by AI to accomplish everyday tasks such as:

1. making phone calls
2. navigating their computer using their voice or sign language



- كما يمكن لذوي الهمم استخدام المساعدين الشخصيين الافتراضيين المفعلين بواسطة الذكاء الاصطناعي، لإنجاز المهام اليومية مثل:

- ١- القيام بالاتصالات الهاتفية
- ٢- أجهزة الكمبيوتر الخاصة بهم باستخدام أصواتهم أو لغة الإشارات.

Exercises

Put (✓) or (X) :

- 1- Augmented reality (AR) Augmented reality (AR) combines the real world with a virtual world ()
- 2- AR helps students become active participants in learning and makes learning more memorable.. ()
- 3- Augmented reality technology can be used in education. ()
- 4- People of determination can use virtual assistants powered by AI to accomplish everyday tasks ()
- 5- People with disabilities suffer when using technology. ()
- 6- Through augmented reality, visually impaired individuals can see their family members up close. ()
- 7- You can visit museums virtually through virtual reality technology. ()
- 8- sky map app is One of the applications used in teaching science. ()
- 9- Virtual reality is a simulated 3-D environment that allows users to explore and interact with the surroundings, as if it were reality. ()
- 10- The Uber app use artificial intelligence to match riders with available drivers ()



Choose the correct answer:**(AI – VR – AR – People of determination - sky map)**

- 1- _____ is one of the applications used in teaching science.
- 2- _____ is the ability of a machine like a computer to think and learn.
- 3- _____ is a three-dimensional virtual environment.
- 4- _____ combines the real world with virtual world.
- 1- Through future technology, it is possible to improve people's lives. _____

Choose the correct answer:

- 1- is the ability of a machine such as a computer to think and learn
a. VR b. AR c. AI
- 2- Disabled people can use virtual assistants powered by To do everyday tasks, such as navigation their computer .
a. AI b. AR c VR
- 3- A computer learns by The provided examples .
a. Analyzing b. storing c. saving
- 4- Students can use a App to point at the night sky and see a digital layer of labeled stars, planets and nebulae using AR .
a. Google Maps b. Vlaby c. Sky Map
- 5-Visually impaired people can useto see their family members up close .
a. AI b. AR c. hearing aids

Mention the uses of Futuristic Technology to improve the lives of people with disabilities?

.....

.....



Evaluating cutting – edge technology

Reliable cutting-edge technology: this is the newest and most advanced version of a service or product.

التكنولوجيا المتطورة الموثوق بها: أحدث إصدار من إحدى الخدمات أو أحد المنتجات وأكثرها تقدما

Assistive technology: helps people of determination with tasks they find challenging,

التكنولوجيا المساعدة : تساعد الأشخاص ذوي الهمم في أداء المهام التي يجدون صعوبة في أدائها

for example:

- screen magnification software
- hearing aids
- programs that turn speech to text and text to speech.
- smart gloves that:
empower deaf people to translate their signs in real time to spoken or text output



- برمجيات تكبير الشاشة،
- ووسائل المساعدة السمعية
- والبرامج التي تحوّل الكلام إلى نص والنص إلى صوت مسموع.
- القفازات الذكية من فئة التكنولوجيا المساعدة، التي تمكن الأشخاص الصم من ترجمة

إشاراتهم فورياً إلى مخرَج نصي أو منطوق



Cutting-edge technology, such as (AI), (AR) and (VR), has transformed life in ways that were unimaginable even a decade ago.

-Help in education and People Of Determination

من مزايا التكنولوجيا المتطورة

- المساعدة في التعليم
- مساعدة الأشخاص ذوي الهمم.

It is important to be objective and **evaluate** these new technologies

- من المهم أن نكون موضوعيين ونقوم بتقييم هذه التكنولوجيات الجديدة.

User experiences

describes how people **use** and **interact** with a product , and how they **evaluate** their experiences.

تجربة المستخدم

ترتبط تجربة المستخدم بتطوير المنتجات

تصف تجربة المستخدم كيفية استخدام الأشخاص المنتج والتفاعل معه، وكيفية تقييمهم تجاربهم

To determine the most useful assistive technology products:

- Awareness of the person's abilities and challenges
- Identify and define a specific need
- Brainstorm possible cutting-edge assistive technology products
- Designing and testing
- Reviewing what works well, what doesn't work as well, and adapting.

11



لتحديد أكثر منتجات التكنولوجيا المساعدة فائدة :

- الوعي بقدرات الشخص وتحدياته.
- هل هي سهلة الاستخدام
- التفكير في أكثر منتجات التكنولوجيا المساعدة تطورًا.
- التصميم والاختبار.
- إعادة النظر في منتجات التكنولوجيا المساعدة التي تعمل بشكل جيد، والتي لا تعمل بشكل جيد والتعديل فيها لتتلاءم مع حاجات المستخدم.

كيف تقيم المنتج . How to evaluate the product

User experience categories	Questions to guide my evaluation
	اسئلة لتوجيه عملية التقييم
Accessible سهولة الوصول	Is it accessible for people of determination ? هل هذه التكنولوجيا متاحة لأصحاب الهمم ؟
Credible جديرة بالثقة	Are the company and its products trustworthy? هل الشركة ومنتجاتها جديرة بالثقة ؟
Desirable مرغوب فيه	Does the product meet your needs هل بلبي المنتج احتياجاتك ؟
Findable قابلية إيجاد حل	If there is an issue with the project or service, can find the solution إذا كانت هناك مشكلة فى المشروع أو الخدمة فهل يمكننى إيجاد حل ؟
Usable قابلة للاستخدام	Is it easy to use هل هي سهلة الاستخدام ؟
Useful مفيدة	Is it practical هل هذه التكنولوجيا عملية ؟
valuable قيمة	Does this product improve my life or help me learn? هل هذه التكنولوجيا تحسن حياتي أو تساعدني في التعلم ؟



Meeting needs تلبية الاحتياجات

- User experience is interlinked with the development of products and services.
ترتبط تجربة المستخدم بتطوير المنتجات والخدمات.

Cutting-edge assistive technology is incredibly varied, but the goal is the same - to improve someone's independence, and consequently inclusion in society.

- على سبيل المثال، تتنوع التكنولوجيا المساعدة المتطورة كثيراً، ولكن الهدف هو نفسه - تحسين استقلالية شخص ما، وبالتالي اندماجه في المجتمع.

Exercises**Put (✓) or (X) :**

- 1- Assistive technology helps people with disabilities perform tasks . ()
- 2- Examples of assistive technology include screen magnification software. ()
- 3- hearing aids help people with disabilities who have visual impairments. ()
- 4- There are programs that assist the blind by converting written text into audio.
- 5- It is important to be objective and evaluate these new technologies. ()
- 6- Technology can be used to assist in self-learning. ()
- 7- Smart gloves empower deaf people to translate their signs in real time to spoken or text output ()
- 8- To determine the most useful assistive technology products Identify and define a specific need ()



9- Cutting-edge technology has transformed life in ways that were unimaginable even a decade ()

10- Assistive technology this is the newest and most advanced version of a service or product. ()

Complete the following sentences using the words between the brackets :

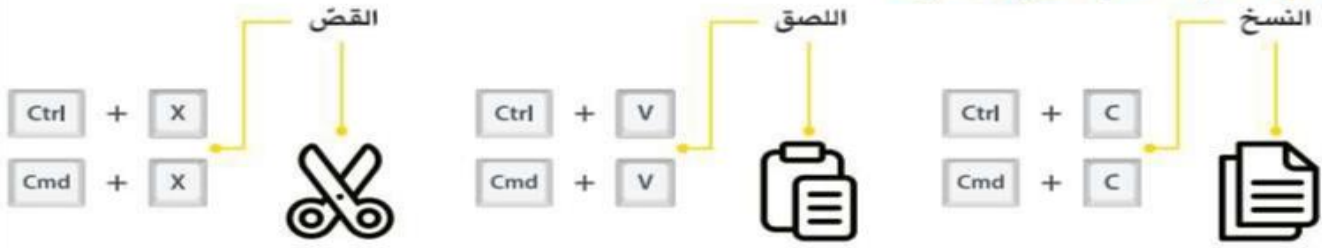
(Cutting-edge technology - User experiences – Smart gloves – Assistive technology – Hearing aids)

- 1- translate sign language to speech or text .
- 2- helps people of determination with tasks they find challenging.
- 3- is / are a type of assistive technology that can help people with hearing trouble .
- 4- is / are how people feel about using a product .
- 5- is / are the latest and most advanced technology .



Digital research skills

أدوات البحث الرقمي المفيدة

Useful digital search tools

Copy, paste and **cut** are some of the most commonly used word processing commands

النسخ واللصق والقص من أكثر أوامر معالجة الكلمات شيوعاً،

and are very useful when copying, pasting, or cutting text, information for citing sources, or images into a word processing file.

وهي مفيدة جداً عند نسخ أو لصق أو قص نص أو معلومات خاصة بالاستشهاد بمصادر أو صور في ملف معالجة النصوص.

Digital search tools

Internet searches, specialized search engines, and verified online libraries all search for information, but the results will be different.

- البحث عبر الإنترنت، ومحركات البحث المتخصصة، والمكتبات الإلكترونية الموثوقة والمتاحة عبر الإنترنت تساعد في البحث عن المعلومات المطلوبة، لكن النتائج الصادرة عن كل منها تكون مختلفة.

Search engines

Search engines help people to search internet websites based on the **keywords** and **phrases**.



- تساعد محركات البحث الأشخاص على البحث في مواقع الإنترنت بناءً على الكلمات والعبارات الرئيسية.



They are **user-friendly**, very **fast**, and often result in many results. Use your **evaluation skills** to ensure the content you select is **credible**, **accurate**, and **unbiased**.

- وهي سهلة الاستخدام وسريعة جداً، وغالباً ما تظهر العديد من النتائج. استخدم مهارات تقييمك للتأكد من أن المحتوى الذي تختاره موثوق به ودقيق وغير متحيز.

Databases

Databases are **collections of information** which are typically stored in a **computer system**

- عبارة عن مجموعات من المعلومات، تخزن عادةً في نظام حاسوبي
and can be accessed, for free, through a school or library.

- ويمكن الوصول إليها مجاناً من خلال مدرسة أو مكتبة
- A database is a good place to search for information from journals, newspapers, and reference books.

- قاعدة البيانات مكان جيد للبحث عن المعلومات من المجلات والصحف والكتب المرجعية.

-The **EKB** is an example of a **general database** which covers **many subjects**. the results will be credible and accurate.



Egyptian Knowledge Bank
بنك المعرفة المصري

" بنك المعرفة المصري EKB " قاعدة بيانات **عامة** تتطرق إلى
العديد من الموضوعات. ستكون موثوقة ودقيقة.



A **subject database** covers only **one subject**, such as business or law, and any results will be specific to your topic.

تتناول قاعدة البيانات **المتخصصة** subject database موضوعا واحدا فقط، مثل ريادة الأعمال أو القانون، وأي من نتائجها سيكون محددا لموضوع بحثك.

Library catalogs

A library catalog is a **database** which includes all the items owned by a library. A library catalog search may include (**recently published books - e-books**)

فهرس المكتبة هو قاعدة بيانات تضم كل المصادر والعناصر التي تحتويها المكتبة مثال : كتب منشورة حديثا - الكتب الإلكترونية



Conducting a database search

- Use a **keyword** search. **Review** the results for subject

- استخدم البحث بالكلمات المفتاحية

-You can use other database fields, such as **author** or **journal title**, to **narrow** a search.

- البحث باستخدام اسم المؤلف أو عنوان المجلة لتضييق نطاق البحث.

-**Limiting** a search to the last few years will help you find the most **up-to-date** research.

- سيساعدك حد البحث بالسنوات القليلة الماضية في العثور على أحدث الأبحاث



Exercises**Put (✓) or (X) :**

- 1- There are several ways to search according to your specific goal. ()
- 2- Copy, paste and cut are some of the most commonly used word processing commands ()
- 3- To cut a text, use the command CTRL + C. ()
- 4-EKB is considered an Examples of reliable digital libraries ()
- 5- Specialized search engines help you find the information you want. ()
- 6- It is preferable to use keywords when searching for information. ()
- 7- A subject database covers only many subjects. ()
- 8- The EKB is an example of a general database which covers many subjects ()
- 9- Databases in a school or library are an unsafe place to search for information.
- 10- Databases are collections of information which are typically stored in a computer system()
- 11- A library catalog is a database which includes all the items owned by a library
- 12- . A library catalog search may include recently published books and e-books()
- 13- You can't use other database fields, such as author or journal title when Conducting a database search ()
- 14- There are only one type of database ()
- 15- Be sure the search result you select is credible and accurate ()



Choose the correct answer:**(Library catalogs - EKB – CTRL+V – Search engine- Databases)**

- 1- _____ is used to paste text.
- 2- Google is considered one of the most famous _____.
- 3- _____ is a database which includes all the items owned by a library.
- 4- _____ collections of information which are typically stored in a computer system
- 5- _____ is an example of a general database.

- Mention 3 ways to search for information:

.....

.....

.....

- Type a keyboard shortcut:

For cutting text

For copying text

For pasting text.....

-What is the search tool used?

- 1- Ahmed searched for the science curriculum on Google. (.....)
- 2- Salma searched for a mathematics book in the library. (.....)
- 3- Mohammed likes to search for some information from reliable and accurate sources. (.....)



OPERATING SYSTEMS

Operating systems

-An operating system (**OS**) is the software that **manages** a computer's functions, such as memory, drives, printers, and other devices.



- هو البرنامج الذي يدير ويتحكم بكل وظائف الكمبيوتر وبرامجه مثل الذاكرة ومحركات الأقراص والطابعات والأجهزة الأخرى.

-It also includes accessible devices such as **screen readers** and **magnifiers**.

- ويشمل أيضًا الأجهزة المساعدة مثل قارئات ومكبرات الشاشة.

-Work as a **translator**, allowing a user to communicate with the computer without knowing computer languages.

- ويعمل مترجمًا، وهذا يمكن المستخدم من التواصل مع الكمبيوتر من دون الحاجة إلى معرفة لغاته.

Most computers come **pre-loaded** with an operating system:

- Worldwide, Microsoft **Windows** is used on **75%** of computers.
- **Apple** computers run on **macOS** (**15%** of the world market).
- **Linux** and **Chrome OS** are each used on about **2-3%**.



Mac OS X



Mobile operating systems

Mobile devices have mobile operating systems.

-The most popular mobile **OSs** are:

- Android** (72% of the world market)
- **Apple iOS** (27%), which is used on the iPhone.



Android uses **open**-source software, which means the programming code can be read or changed by anyone.

Apple iOS is **closed**; it can't be seen or changed by the public.

- نظام Android مفتوح المصدر: ما يعني أنه يمكن لأي شخص قراءة شفرة البرمجة أو تغييرها، في حين لا يمكن لعامة الناس رؤية شفرة البرمجة الخاصة بنظام تشغيل Apple iOS "المغلق" أو تغييرها.

Both **Android** and **iOS** perform the same **basic functions**, such as messaging, web access, video chat and touch function.

Cutting-edge operating systems :

the Robot Operating System (**ROS**) is opensource software for building **robot applications**.



-نظام تشغيل الروبوت (Robot Operating System) وهو برنامج مفتوح المصدر لبناء التطبيقات الروبوتية.

- And there are multiple operating systems powering self-driving cars, including those developed by Apple, CarPlay and Windows Tm Automotive as well as individual car companies.

-والعديد من أنظمة التشغيل التي تشغل السيارات ذاتية القيادة، التي تتضمن تلك التي طورتها شركة "أبل"، وشركة Apple, CarPlay and Windows Tm Automotive



Programming languages

- **Instructions** to a computer are given in **code**.

- تُعطى الأوامر لجهاز الكمبيوتر على هيئة شفرة.

- Over time, programming languages have **evolved** from simple machine language (binary) to high-level human-like languages.

وبمرور الوقت، تطورت لغات البرمجة من لغة الآلة البسيطة (النظام الثنائي) إلى لغات عالية المستوى شبيهة باللغة التي يفهمها البشر.

Computer languages often share similarities, so once you learn one, it is easier to learn others.

- وغالبا ما تتشابه لغات الكمبيوتر؛ لذلك بمجرد أن تتعلم لغة واحدة، يتييسر لك تعلم اللغات الأخرى.

- Programmers **choose** a language based on **purpose**.

- يختار المبرمجون اللغة المناسبة بناءً على الهدف.

- **Programming languages** are usually **open source**. Anyone can see, modify, or distribute the code.

- وعادة ما تكون لغات البرمجة مفتوحة المصدر. حيث يمكن لأي شخص رؤية الشفرة أو تعديلها أو توزيعها.

- Programmers use Hyper Text Markup Language (**HTML**) to **create web pages**.

- يستخدم المبرمجون لغة ترميز النصّ التشعبي (HTML) لإنشاء صفحات الويب،



HTML is allows creators to add **elements** such as **text, links, images, audio, and even videos** to their web

تسمح هذه اللغة بإضافة عناصر مثل النصوص، والروابط، والصور، والمقاطع الصوتية، ومقاطع الفيديو إلى صفحات الويب

pages. It is **easy** to make **changes** and it is compatible with all the major web browsers.

- كما أنه سهل تعديلها وهي ملائمة لكل متصفحات الويب الكبرى.



Exercises

Put (✓) or (X) :

- 1- Computers and mobile phones have the same operating system ().
- 2- The operating system is considered a hardware component inside the computer
- 3- The operating system is the software that manages a computer's functions ().
- 4- The user can interact with the computer without the operating system ().
- 5- The operating system Work as a translator, allowing a user to communicate with the computer without knowing computer languages. ().

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- 6- Most computers come pre-loaded with an operating system ().
- 7- Apple computers run on macOS ().
- 8- Android is an open-source system available to everyone ().
- 9- All operating systems are open-source and available to everyone ().
- 10- When you can see and read the program's code and modify it, this means it is open-source().
- 11- The most popular mobile OSs are android and windows ().
- 12- Cars can become self-driving through specific operating systems. ().
- 13- Programmers use HTML language to design mobile games. ().
- 14- the Robot Operating System (ROS) is open-source software for building-robot applications. ().
- 15- Programming languages are usually closed-source. ()

Choose the correct answer:

(HTML - Programming languages - Operating System – Android - windows)

- 1- _____ The most popular OSs used in most computers.
- 2- _____ is a language used in designing web pages.
- 3- _____ Instructions to a computer are given in code.
- 4- _____ uses an open-source program for smartphones.
- 5- _____ is the software that controls computer's functions.



Choose from column (A) what suits it in column (B) :

(A)	(B)
1- Translates commands between the user and the computer	a-Linux
2- One of the computer operating systems	b - Operating System
3- Apple IOS	c-HTML
4- allows creators to add elements such as text, links, images, audio, and even videos to their web	d - which is used on the iPhone devices
5-Android	e. is the most popular mobile operating system worldwide



حمل الآن

مجاناً وحصرياً

المراجعة رقم (3)

اختبار شهر اكتوبر



Q1: Choose the correct answer

- 1- is a device that connects a local area network to the internet
- a) Modem
 - b) Laptop
 - c) Router
 - d) Server
- 2- Send data to a specific device over a network
- a- Switches
 - b- Routers
 - c- Ports
 - d- wires
- 3- networks connect devices without wiring
- a- Historical
 - b- Imitate
 - c- Wireless
 - d- complex
- 4- is a 3D environment that allows users to explore and interact with the surroundings as if it were reality
- a- VR
 - b- AI
 - c- AR
 - d- ICI



- 5- are devices that can be connected to the internet
- a- Desktop computers
 - b- Laptops
 - c- Smart devices
 - d- All of them
- 6- A vacuum cleaner is the form of a robot used to avoid furniture
- a- AI
 - b- VR
 - c- AR
 - d- IOT
- 7- combines the real world with a virtual world by adding images using computers
- a- Augmented reality
 - b- VR
 - c- Artificial intelligence
 - d- Both (a) and (b)
- 8- helps students become active participants in learning and makes learning more memorable
- a- RV
 - b- AR
 - c- VR
 - d- AI



- 9- is used to unlock your phone with facial recognition
- a- AI
 - b- AR
 - c- VR
 - d- 3D
- 10- Augmented reality can be done through a
- a- Tablet
 - b- Computer
 - c- Hardware
 - d- disk
- 11- Is an example of assistive technology
- a- Robots
 - b- Bluetooth speakers
 - c- Hearing aids
 - d- Computers
- 12- helps people of determination, for example, screen magnification software and hearing aids
- a- Augmented reality
 - b- Cutting-edge technology
 - c- Artificial intelligence
 - d- Assistive technology
- 13- Artificial intelligence (AI), augmented reality (AR), and virtual reality (VR) are examples of
- a- Augmented reality
 - b- Artificial intelligence
 - c- Cutting-edge technology
 - d- Assistive technology



- 14- describes how people use the product and interact with it, and how they evaluate their experiences
- a- User experiences
 - b- Meeting needs
 - c- Both of them
 - d- None of them
- 15- is the latest and most advanced version of a service or product
- a- Augmented reality
 - b- Artificial intelligence
 - c- Assistive technology
 - d- Cutting-edge technology
- 16- Can help people to search internet websites based on the keywords and phrases
- a- Search engines
 - b- Database
 - c- Library catalogs
 - d- Google chrome
- 17- You can search for information from magazines and newspapers through the
- a- Search engines
 - b- Database
 - c- Library catalogs
 - d- Google chrome



18- To get useful search results and to narrow your search you can

- a- Search by author name
- b- Search title of the journal
- c- Search by specifying dates
- d- All of them

19- A is a database which includes all the items owned by a library

- a- Search engine
- b- Database
- c- Library catalogs
- d- Google

20- A/An Is the software that manages a computer's function

- a- Windows
- b- Device
- c- Operating system
- d- Android

21- instructions to a computer are given in

- a- Code
- b- Source
- c- Password
- d- Words

22- is the operating system functions

- a- Runs a computer's software
- b- Runs a computer's hardware
- c- Open source
- d- Both a and b



23- Computers run on macOS

- a- Apple
- b- iPad
- c- Android
- d- Windows

24- means a person can change and read the programming code

- a- Open-source software
- b- Closed-source software
- c- Both a and b
- d- None of them

25- is the standard programming language used to create web pages

- a- <=
- b- MacOS
- c- OSs
- d- HTML

26- The HTML tag <h1> </h1> refers to

- a- Largest heading
- b- Subheading
- c- Smaller subheading
- d- Create a paragraph

27- The function of <a> is

- a- Create hyperlink
- b- Change text to underline
- c- Change text to bold
- d- Change text to italic



28- Most computers come pre-loaded with an

- a- Operating system
- b- Windows explorer
- c- E-readers
- d- Google chrome

29- refers to instructions given to computer in a code

- a) ROS
- b) Language Programming
- c) Operating system
- d) Both a and c

Q2: Put (true) or (false)

- 1- Computers don't need network connection devices to transfer data ()
- 2- Computer networks connect computers together to share important information and data ()
- 3- VR works to imitate sounds when provided with the tone of voice of an actual human being ()
- 4- Using windows helps students become active participants in learning and makes learning more memorable ()
- 5- There is no difference between augmented reality and virtual reality ()
- 6- Users often wear normal glasses that block out the real world and provide views that immerse the user in another world ()
- 7- Cutting-edge technology is the latest and most advanced version of a service or product ()
- 8- Smart Gloves are from assistive technology ()



- 9- User experience does not describe how to use the product ()
- 10- Copy, paste and cut are from digital editing tools ()
- 11- EKB is an example of an unreliable website and is a database ()
- 12- An operating system includes accessible devices such as printers and scanners ()
- 13- Microsoft windows run the most computers worldwide ()
- 14- PowerPoint is a programming language used to create webpages ()
- 15- Operating systems are responsible only for managing hardware ()
- 16- Android runs on Mac devices ()
- 17- The HTML tag `<h6> ... </h6>` is the correct tag to add small subheadings to webpages ()
- 18- In HTML language, you cannot add some elements such as headings and images to webpages ()
- 19- The tag `<i> ... </i>` refers to emphasized text ()
- 20- The tag `<font> ... </font>` is used to change the font size only ()



Q3: Read and write the name of the app or tool

- 1- It is a device that connects a local area network (LAN) to the internet
- 2- Abbreviation of (AI)
- 3- It is the ability of computers to think, learn and deduce
- 4- It blocks out the real world and provides views that immerse the user in another world
- 5- It is open-source software used for building robot applications

Q4: Read and write the categories

(Findable – Credible – Usable – Accessible – Valuable)

- 1- Does the product improve my life or help me learn?
- 2- If there is an issue with the project or service, can I find the solution?
- 3- Are the company and its products trustworthy?
- 4- Is it easy to use?
- 5- Is it accessible for people of determination?

Q5: Read and correct words between brackets

- 1- AI, AR, and VR are examples of (Assistive technology)
- 2- (Databases) help people to search internet websites based on the key words and phrases
- 3- (search engine) is a database which includes all the items owned by a library
- 4- Small screens can make reading texts challenging and viewing complex graphics (easy)



- 5- Scanning (AR codes) to access content-related video, audio, and texts is one of the advantages of using mobile phones in education

Q6: Match

a)

1-MacOS	a-The operating system used on apple mobile devices
2-iOS	b-The operating system used on Microsoft PCs
3-Android	c-The operating system used on mobile devices other than apple products
4-Windows	d-The operating system used on Apple PCs

b)

1-<a>...	a-For creating paragraph
2-<i>... </i>	b-Change the text to italic
3-...	c-To create heading
4- ...	d-Change the font size and color
5- ...	e-To create hyper link



Model Answers

Q1: Choose the correct answer

1- is a device that connects a local area network to the internet

a) **Modem**

b) Laptop

c) Router

d) Server

2- Send data to a specific device over a network

a- **Switches**

b- Routers

c- Ports

d- wires

3- networks connect devices without wiring

a- Historical

b- Imitate

c- **Wireless**

d- complex

4- is a 3D environment that allows users to explore and interact with the surroundings as if it were reality

a- **VR**

b- AI

c- AR

d- ICI



5- are devices that can be connected to the internet

- a- Desktop computers
- b- Laptops
- c- Smart devices

d- All of them

6- A vacuum cleaner is the form of a robot used to avoid furniture

- a- AI
- b- VR
- c- AR
- d- IOT

7- combines the real world with a virtual world by adding images using computers

- a- Augmented reality
- b- VR
- c- Artificial intelligence
- d- Both (a) and (b)

8- helps students become active participants in learning and makes learning more memorable

- a- RV
- b- AR
- c- VR
- d- AI

9- is used to unlock your phone with facial recognition

- a- AI
- b- AR



- c- VR
- d- 3D
- 10- Augmented reality can be done through a
- a- **Tablet**
- b- Computer
- c- Hardware
- d- disk
- 11- Is an example of assistive technology
- a- Robots
- b- Bluetooth speakers
- c- **Hearing aids**
- d- Computers
- 12- helps people of determination, for example, screen magnification software and hearing aids
- a- Augmented reality
- b- Cutting-edge technology
- c- Artificial intelligence
- d- **Assistive technology**
- 13- Artificial intelligence (AI), augmented reality (AR), and virtual reality (VR) are examples of
- a- Augmented reality
- b- Artificial intelligence
- c- **Cutting-edge technology**
- d- Assistive technology
- 14- describes how people use the product and interact with it, and how they evaluate their experiences
- a- **User experiences**



b- Meeting needs

c- Both of them

d- None of them

15- is the latest and most advanced version of a service or product

a- Augmented reality

b- Artificial intelligence

c- Assistive technology

d- Cutting-edge technology

16- Can help people to search internet websites based on the keywords and phrases

a- Search engines

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d- Google chrome

17- You can search for information from magazines and newspapers through the

a- Search engines

b- Database

c- Library catalogs

d- Google chrome

18- To get useful search results and to narrow your search you can

a- Search by author name

b- Search title of the journal

c- Search by specifying dates

d- All of them



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- b- Source
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- a- Runs a computer's software
- b- Runs a computer's hardware
- c- Open source
- d- Both a and b

23- computers run on macOS

- a- Apple
- b- iPad
- c- Android
- d- Windows



24- means a person can change and read the programming code

- a- **Open-source software**
- b- Closed-source software
- c- Both a and b
- d- None of them

25- is the standard programming language used to create web pages

- a- `<=<img src>`
- b- MacOS
- c- OSs
- d- **HTML**

26- The HTML tag `<h1> ..... </h1>` refers to

- a- **Largest heading**
- b- Subheading
- c- Smaller subheading
- d- Create a paragraph

27- The function of `<a> .... </a>` is

- a- **Create hyperlink**
- b- Change text to underline
- c- Change text to bold
- d- Change text to italic

28- Most computers come pre-loaded with an

- a- **Operating system**
- b- Windows explorer
- c- E-readers
- d- Google chrome



29- refers to instructions given to computer in a code

- a) ROS
- b) Language Programming
- c) Operating system
- d) Both a and c

Q2: Put (true) or (false)

- 1- Computers don't need network connection devices to transfer data (F)
- 2- Computer networks connect computers together to share important information and data (T)
- 3- VR works to imitate sounds when provided with the tone of voice of an actual human being (F)
- 4- Using windows helps students become active participants in learning and makes learning more memorable (F)
- 5- There is no difference between augmented reality and virtual reality (F)
- 6- Users often wear normal glasses that block out the real world and provide views that immerse the user in another world (F)
- 7- Cutting-edge technology is the latest and most advanced version of a service or product (T)
- 8- Smart Gloves are from assistive technology (T)
- 9- User experience does not describe how to use the product (F)
- 10- Copy, paste and cut are from digital editing tools (T)
- 11- EKB is an example of an unreliable website and is a database (F)



- 12- An operating system includes accessible devices such as printers and scanner (T)
- 13- Microsoft windows run the most computers worldwide (T)
- 14- PowerPoint is a programming language used to create webpages (F)
- 15- Operating systems are responsible only for managing hardware (F)
- 16- Android runs on Mac devices (F)
- 17- The HTML tag <h6> ... </h6> is the correct tag to add small subheadings to webpages (T)
- 18- In HTML language, you cannot add some elements such as headings and images to webpages (F)
- 19- The tag <i> ... </i> refers to emphasized text (T)
- 20- The tag ... is used to change the font size only (F)

Q3: Read and write the name of the app or tool

1-It is a device that connects a local area network (LAN) to the internet. **Modem**

2-Abbreviation of (AI). **Artificial Intelligence**

3-It is the ability of computers to think, learn and deduce.

Artificial Intelligence (AI)

4-It blocks out the real world and provides views that immerse the user in another world. **Virtual reality (VR)**

5-It is open-source software used for building robot applications. **Robot operating system (ROS)**



Q4: Read and write the categories

(Findable – Credible – Usable – Accessible – Valuable)

1-Does the product improve my life or help me learn? **Valuable**

2-If there is an issue with the project or service, can I find the solution? **Findable**

3-Are the company and its products trustworthy? **Credible**

4-Is it easy to use? **Usable**

5-Is it accessible for people of determination? **Accessible**

Q5: Read and correct words between brackets

1- AI, AR, and VR are examples of (Assistive technology)

Cutting age technology

2- (Databases) help people to search internet websites based on the key words and phrases. **Search engines**

3- (search engine) is a database which includes all the items owned by a library. **Library catalog**

4- Small screens can make reading texts challenging and viewing complex graphics (easy). **Difficult/hard**

5- Scanning (AR codes) to access content-related video, audio, and texts is one of the advantages of using mobile phones in education. **QR code**



Q6: Match

a)

1-MacOS (D)

2-iOS (A)

3-Android (C)

4-Windows (B)

b)

1-<a>... (E)

2-<i>... </i> (B)

3-... (D)

4-<h1>...</h1> (C)

5-<p>...</p> (A)



حمل الآن

مجاناً وحصرياً

المراجعة رقم (4)

اختبار شهر اكتوبر



Weekly Assessment: (اختار اختبار واحد فقط مع الواجب المنزلي)

1- performs complex tasks that simulate the human element in thinking and performance

- 1- is used to convert the signal received from the ISP into a digital signal.

- 1- The technology of helps to imitate sounds by providing them with the tone of a natural human voice

- Through the Internet, I search for the importance of computer networks. Write one sentence from the search results

1- The cables and wires in wired networks are connected to places called

- Mr-Belal Nasr 01065760483

Sixth grade primary – Weekly assessment and homework – Second week 2

Weekly Assessment: (اختار اختبار واحد فقط مع الواجب المنزلي)

Test1

1- is used as a three-dimensional environment that allows you to deal with what you see and hear as if it were real

A-Virtual reality

B-Converters

C-Digital footprint

D-Assistive technology

2- technology is used to open the phone using the facial recognition system.

A-Assistive technology

B-Artificial intelligence

C-Virtual reality

D-Converters

Test 2

1- You can go to an ancient archaeological site and go back thousands of years, using technology

A-Virtual reality

B-Modem

C-Bluetooth

D-Router

2- technology combines the real world and virtual reality

A-Router

B-Augmented reality

C-Bluetooth

D-Digital footprint

Test 3

1- technology helps in teaching in an interactive way and consolidating information.

A- Digital footprint

B- Transformers

C- Modem

D- Augmented reality

2- Headset are worn to deal with technology

A- Virtual reality

B- Digital footprint

C- Hacking

D- Scanner

Class assessment

Using the Internet, search for assistive technology, write one sentence or phrase about it.

Homework:

1- You can see atoms and insects larger than you using technology

A- Virtual reality

B- Transformers

C- Modem

D- Router

2- technology improves the lives of people with disabilities.

A- Assistive

B- Old

C- Traditional

D- Complex

Sixth grade primary – Weekly assessment and homework – Third week 3**Weekly Assessment: (اختار اختبار واحد فقط مع الواجب المنزلي)****Test 1**

1- Technology is the latest and most advanced version of services and products.

A- Cutting edge

B- Old

C- Past

C- Traditional

2- Enlarging the font size on your phone screen is an important feature because it:

A. It changes the look of your phone.

B. It makes the colors more beautiful.

C. It speeds up the device.

D. It helps people with poor eyesight

Test 2

1- Technology has helped people with disabilities to enlarge the screen and audio and convert speech to text and vice versa

A- Traditional

B- Assistance

C- Past

D- Hacking

2- Helped in the instant translation of the sign of deaf people.

A- Screen enlargement programs

B- Bell ball

C- Prosthetic leg

D- Smart gloves

Test 3

1- Elements of evaluating good products

A- High cost

B- Poor manufacturing

C- Ability to find a solution

D- Manufacturing country

2- Most important goals of assistive technology

A- Difficulty of use

B- Improving someone's independence

C- Not useful for others

D- Difficulty of access

Class evaluation

In the text formatter program, write a sentence about advanced technology and how it meets the needs of people with disabilities

Homework:

1- Points to consider when buying a good product

A- Usability

B- Difficulty of use

C- Manufacturing country

D- No need for it

2- Goals of technology Meeting the needs of people with disabilities

A- Help

B- Traditional

C- Digital footprint

D- Piracy

Sixth grade primary – Weekly assessment and homework – Third week 4**Weekly Assessment: (اختار اختبار واحد فقط مع الواجب المنزلي)****Test 1**

- 1- Cut, copy and paste commands are among the most used commands in word processing programs. ()
- 2- You can use keywords to search within the database. ()
-

Test 2

1. If you want to make a copy of something, select it and then press Ctrl+X together.()
- 2- The Egyptian Knowledge Bank EKB is an example of a "public database". ()
-

Test 3

- 1- Specialized search engines help in searching for the required information. ()
- 2- You can use the Alexandria Library catalog through the library's website. ()
-

Class Evaluation

Through the Alexandria Library website, search for one of the stories you want to read.

Homework:

- 1- It is a collection of information, usually stored in a computer system.
- A- Paper books. B- Databases.
- C- Search engines. D- Digital search tools.
- 2- It is a database, which includes all the sources and items contained in the library.
- A- Library catalog. B- Internet.
- C- Paint program. D- Search engine.

Sixth grade - Weekly assessment and homework -
Week 5 Lesson 7 (Operating systems)

Weekly assessment:

Test 1

Put (True) or (False):-

- 1- Apple computers run on Microsoft Windows only. ()
2- Apple iOS is considered an "open source" system. ()

Test 2

- 1- The operating system is a program that controls the functions of the computer. ()
2- The robot operating system is a "closed source" program. ()

Test 3

- 1- The operating system manages computer programs and hardware. ()
2- The most common mobile operating system is Microsoft Windows. ()

Class assessment

Using the Internet, identify the similarities or differences between the characteristics of smartphone screens Different.

Homework

1- Operating system It is an open source program used to build robotic applications.

- A- Microsoft Windows
C- Android.

- B- Robot Operating System - ROS.
D- Apple iOS.

2- Programmers use the Hypertext Markup Language to create web pages.

- A- Automative.
C- HTML

- B- macOS.
D- Apple iOS.

Sixth grade primary - Weekly assessment and homework - First week (1)

Weekly Assessment: (اختار اختبار واحد فقط مع الواجب المنزلي)

Test 1

1- performs complex tasks that simulate the human element in thinking and performance

A- Artificial intelligence

B- Switches

C- Digital fingerprint

D- Wired networks

2- Types of wireless networks are connected by

A- Ports

B- Wi-Fi

C- Modem

D- Switches-

Test 2

1- is used to convert the signal received from the ISP into a digital signal.

A- Modem

B- Ports

C- Wi-Fi

D- Switches

2- The Internet Service Provider is known by the abbreviation

A- ISP

B- USB

C- GPR

D- GPS

Test 3

1- The technology of helps to imitate sounds by providing them with the tone of a natural human voice

A-Artificial Intelligence

B-Headphones

C-Bluetooth

D-Assistive Technology

2- The local area network (LAN) connected by a connecting cable between computers is considered one of the types of networks

A-Wired

B-Wireless

C-Wide-range

D-Wi-fi

Class Assessment

Through the Internet, I search for the importance of computer networks. Write one sentence from the search results

Homework:

1- The cables and wires in wired networks are connected to places called

A- Ports

B- Wi-Fi

C- Modem -

D- Switches

2- The helps to send data to a specific device over the network easily and smoothly.

A- Switches

B- Ports

C- Wi-Fi

D- Mouse

Sixth grade primary – Weekly assessment and homework – Second week 2

Weekly Assessment: (اختار اختبار واحد فقط مع الواجب المنزلي)

Test1

1- is used as 3D environment that allows you to deal with what you see and hear as if it were real

A-Virtual reality

B-Converters

C-Digital footprint

D-Assistive technology

2- technology is used to open the phone using the facial recognition system.

A-Assistive technology

B-Artificial intelligence

C-Virtual reality

D-Converters

Test 2

1- You can go to an ancient archaeological site and go back thousands of years, using technology

A-Virtual reality

B-Modem

C-Bluetooth

D-Router

2- technology combines the real world and virtual reality

A-Router

B-Augmented reality

C-Bluetooth

D-Digital footprint

Test 3

1- technology helps in teaching in an interactive way and consolidating information.

A- Digital footprint

B- Transformers

C- Modem

D- Augmented reality

2- Headset are worn to deal with technology

A- Virtual reality

B- Digital footprint

C- Hacking

D- Scanner

Class assessment

Using the Internet, search for assistive technology, write one sentence or phrase about it.

Homework:

1- You can see atoms and insects larger than you using technology

A- Virtual reality

B- Transformers

C- Modem

D- Router

2- technology improves the lives of people with disabilities.

A- Assistive

B- Old

C- Traditional

D- Complex

Sixth grade primary – Weekly assessment and homework – Third week 3

Weekly Assessment: (اختار اختبار واحد فقط مع الواجب المنزلي)

Test 1

1- Technology is the latest and most advanced version of services and products.

A- Cutting edge

B- Old

C- Past

C- Traditional

2- Enlarging the font size on your phone screen is an important feature because it:

A. It changes the look of your phone.

B. It makes the colors more beautiful.

C. It speeds up the device.

D. It helps people with poor eyesight

Test 2

1- Technology has helped people with disabilities to enlarge the screen and audio and convert speech to text and vice versa

A- Traditional

B- Assistive technology

C- Past

D- Hacking

2- Helped in the instant translation of the sign of deaf people.

A- Screen enlargement programs

B- Bell ball

C- Prosthetic leg

D- Smart gloves

Test 3

1- Elements of evaluating good products

A- High cost

B- Poor manufacturing

C- Ability to find a solution

D- Manufacturing country

2- Most important goals of assistive technology

A- Difficulty of use

B- Improving someone's independence

C- Not useful for others

D- Difficulty of access

Class evaluation

In the text formatter program, write a sentence about advanced technology and how it meets the needs of people with disabilities

Homework:

1- Points to consider when buying a good product

A- Usability

B- Difficulty of use

C- Manufacturing country

D- No need for it

2- Goals of technology Meeting the needs of people with disabilities

A- Help

B- Traditional

C- Digital footprint

D- Piracy

Sixth grade primary – Weekly assessment and homework – Third week 4

Weekly Assessment: (اختار اختبار واحد فقط مع الواجب المنزلي)

Test 1

- 1- Cut, copy and paste commands are among the most used commands in word processing programs. (T)
- 2- You can use keywords to search within the database. (t)
-

Test 2

1. If you want to make a copy of something, select it and then press Ctrl+X together.(f)
- 2- The Egyptian Knowledge Bank EKB is an example of a "public database". (t)
-

Test 3

- 1- Specialized search engines help in searching for the required information. (t)
- 2- You can use the Alexandria Library catalog through the library's website. (t)
-

Class Evaluation

Through the Alexandria Library website, search for one of the stories you want to read.

Homework:

- 1- It is a collection of information, usually stored in a computer system.
- A- Paper books. B- Databases.
- C- Search engines. D- Digital search tools.
- 2- It is a database, which includes all the sources and items contained in the library.
- A- Library catalog. B- Internet.
- C- Paint program. D- Search engine.

**Sixth grade - Weekly assessment and homework -
Week 5 Lesson 7 (Operating systems)**

Weekly assessment:

Test 1

Put (True) or (False):-

- 1- Apple computers run on Microsoft Windows only. (f)
2- Apple iOS is considered an "open source" system. (f)

Test 2

- 1- The operating system is a program that controls the functions of the computer. (t)
2- The robot operating system is a "closed source" program. (f)

Test 3

- 1- The operating system manages computer programs and hardware. (t)
2- The most common mobile operating system is Microsoft Windows. (f)

Class assessment

Using the Internet, identify the similarities or differences between the characteristics of smartphone screens Different.

Homework

1- Operating system It is an open source program used to build robotic applications.

- A- Microsoft Windows
C- Android.

- B- Robot Operating System - ROS.
D- Apple iOS.

2- Programmers use the Hypertext Markup Language to create web pages.

- A- Automative.
C- HTML

- B- macOS.
D- Apple iOS.

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9

